

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1459 Alexandria, Vignia 22313-1450 www.uspto.gov

FIRST NAMED INVENTOR ATTORNEY DOCKET NO. FILING DATE CONFIRMATION NO. APPLICATION NO. 10/073,928 02/14/2002 Jo Won Chang 2832-0150P 5327 2292 7590 08/19/2003 BIRCH STEWART KOLASCH & BIRCH EXAMINER **PO BOX 747** PHAM, MINH CHAU THI FALLS CHURCH, VA 22040-0747 PAPER NUMBER ART UNIT

1724

DATE MAILED: 08/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

			120
Office Action Summary	Application No.	Applicant(s)	
	10/073,928	CHANG ET AL.	
	Examiner	Art Unit	
	Minh-Chau T. Pham	1724	
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet wit	h the correspondence addres	is
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a relif NO period for reply is specified above, the maximum statutory perions after the reply within the set or extended period for reply will, by stated that the period for reply will, by stated the second patent term adjustment. See 37 CFR 1.704(b).  Status	I. 1.136(a). In no event, however, may a re eply within the statutory minimum of thirty d will apply and will expire SIX (6) MONT ute, cause the application to become AB	ply be timely filed  (30) days will be considered timely.  FHS from the mailing date of this commu	unication.
1) Responsive to communication(s) filed on _	·		
2a) ☐ This action is <b>FINAL</b> . 2b) ☑	This action is non-final.		
3) Since this application is in condition for allo closed in accordance with the practice under			erits is
Disposition of Claims			
4)⊠ Claim(s) <u>1-25</u> is/are pending in the applicati			
4a) Of the above claim(s) is/are withd	rawn from consideration.		
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1,6-10 and 12-21</u> is/are rejected.			
7) Claim(s) <u>2-5,11 and 22-25</u> is/are objected to			
8) Claim(s) are subject to restriction and Application Papers	l/or election requirement.		
9)☐ The specification is objected to by the Exami	ner.		
10) The drawing(s) filed on is/are: a) ac	cepted or b) objected to <b>by</b> t <b>l</b>	ne Examiner.	
Applicant may not request that any objection to	the drawing(s) be held in abeya	ince. See 37 CFR 1.85(a).	
11)☐ The proposed drawing correction filed on	is: a)□ approved b)□ d	isapproved by the Examiner.	
If approved, corrected drawings are required in	reply to this Office action.		
12) ☐ The oath or declaration is objected to by the	Examiner.		
Priority under 35 U.S.C. §§ 119 and 120			
13) Acknowledgment is made of a claim for fore	ign priority under 35 U.S.C. §	§ 119(a)-(d) or (f).	
a) ☐ All b) ☐ Some * c) ☐ None of:			
1. Certified copies of the priority docume	ents have been received.		
2. Certified copies of the priority docume	ents have been received in A	pplication No	
3. Copies of the certified copies of the page application from the International * See the attached detailed Office action for a limit	Bureau (PCT Rule 17.2(a)).		ıge
14) ☐ Acknowledgment is made of a claim for dome	estic priority under 35 U.S.C.	§ 119(e) (to a provisional ap	plication).
a) ☐ The translation of the foreign language   15)☐ Acknowledgment is made of a claim for dome			
Attachment(s)			
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of I	Summary (PTO-413) Paper No(s). nformal Patent Application (PTO-15	
.S. Patent and Trademark Office			

Art Unit: 1724

## Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1, 6-10, 12-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Everetts et al (10, 18, 20 & 24 in Fig. 1; 20 & 34 in Fig. 2; 50, 52, 54 & 56 in Fig. 3; col. 2, line 37 through col. 3, line 23), Miller (6,332,308 B1; 10 & 20 in Fig. 1; 46 & 50 in Fig. 2; 20, 32 & 34 in Fig. 3; 38 & 40 in Fig. 4; col. 4, lines 46-66; col. 5, lines 2-27) and Mai (6,444,002 B1; 14, 20, 22, 24, 30, 36 & 54 in Fig. 1; col. 2, line 46 through col. 3, line 50).

Any one of Everetts et al, Miller and Mai discloses a personal air cleaning apparatus comprising a sucking unit having a suction port for sucking contaminated air and a discharge port for discharging filtered air, a filter, a conduit for connecting the

Art Unit: 1724

sucking unit to a filter, a conduit being a flexible hose adapted to be bent without being folded while fixing the position of the sucking unit so that the sucking unit is adjustable in orientation and height by the flexible hose wherein a portion of the conduit has a diameter smaller than a portion of the sucking port, a blower connected to the discharge port, a motor driving the suction section of the blower and the blower sucking contaminated air through a filter. Both Everetts et al and Miller disclose the sucking port having a branched tube structure so that it allows a plurality of sucking units to be simultaneously connected thereto. Everetts et al further disclose a base of the air cleaning apparatus can be mounted via the base with hinge or nut and bolt members. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide an air cleaning apparatus as taught by any one of Everetts et al, Miller or Mai to provide an air filtration device that can concentrate its suction in places where the particulates in laden air or fumes are being produced and thus effectively clean the dirt laden air.

## Allowable Subject Matter

3. Claims 2-5, 11 and 22-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: None of the prior arts discloses a discharged guide formed with a discharge port arranged around the suction guide while being spaced apart from the suction guide

Art Unit: 1724

by a desired gap to guide a flow of discharged air while having a shape similar of that of the suction guide.

## Conclusion

- 4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - Grunder et al (4,023,472) disclose an apparatus for producing a laminar flow.
  - Eckstein et al (4,045,192) disclose a mobile filtering apparatus.
  - Conrad (4,756,728) disclose an air filtering device.
  - Smith (6,395,047 B1) discloses a portable airborne contamination unit.
- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (703) 308-1605. The examiner can normally be reached on Mon/Tues/Thus/Fri 7:00 am 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (703) 308-1261. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Art Unit: 1724

Minh-Chau Pham

August 15, 2003